NEWS AND VIEWS

of Chemical Preparedness

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Welcome to the new News & Views. I invite your input with news from your agencies that may be of interest to others. Address your news to C.G. Heister at the above address or fax to 303-312-6071 or e-mail Heister.Charles@epa.gov .

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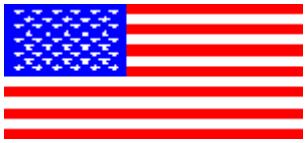

The following is a reprint from the National Domestic Preparedness Office Newsletter February, 2001.

The National Institute of Justice Office of Science and Technology

By John Stedman NIJ

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research agency of the U. S. Department of Justice. Created by the Omnibus Crime Control and Safe Streets Act of 1968, as amended, NIJ is authorized to support research, evaluation, and demonstration programs, development of technology, and both national and international information dissemination.

NIJ's Office of Science and Technology (OST) provides Federal, State, and local law enforcement and corrections agencies access to the best technologies available and helps them develop capabilities essential to improving efficiency and effectiveness.

As part of its efforts in the area of critical incident technology, NIJ has an on-going program focused on combating terrorism. While OST's counter terrorism program focuses on providing state and local law enforcement better tools to combat terrorism, is also addresses needs common to the entire first responder community. This program has initiated several technology efforts. Among them are:

Threat Assessment — In collaboration with the Technical Support Working Group (TSWG) and the Federal Bureau of Investigation (FBI), NIJ is funding a first of its kind study to define the chemical and biological agents that domestic first responders are most likely to encounter and that terrorist are most likely to use. This study, which was jointly funded with the Office for State and Local Domestic Preparedness Support (OSLDPS), is unique because it includes both a historical analysis of chemical and biological incidents, and a scientific assessment of the physical properties of chemical and biological agents to determine the true threat they pose. Anticipated date of completion is the first quarter FY01.

Chemical/Biological Equipment Guidelines – NIJ, through its Office of Law Enforcement Standards at the National Institute of Standards and Technology (NIST/OLES), and with TSWG, is surveying and documenting available chemical and biological defense equipment. This effort, which was also jointly funded with OSLDPS, will result in publication of user guidelines for personal protection, detection, communication, medical, and decontamination equipment. Data will include cost, equipment parameters, current users, existing test data, and ordering information. The first guide has been published and is available online at www.oip.usdoj.gov/nij/pubs-sum/18449.htm

Personal Alarm Monitor — NIJ, in collaboration with TSWG, is sponsoring development and demonstration of a wearable, low-cost device that provides warning of exposure to hazardous chemical and biological agents in sufficient time for the wearer to take protective measures. Approximately 200 prototypes providing a visual warning of exposure to hazardous chemicals should be available for demonstration and assessment in 2001. Some will be tested by the US Army Soldier and Biological Chemical Command (SBCCOM), and the bulk will be provided to law enforcement and other first responders for demonstration under operational conditions to determine, among

other things, how easy they are to use and how susceptible they are to false alarms. Prototypes providing warning of anthrax exposure should follow within a year.

Standard Development — NIJ funded NIST/OLES, acting as executive agent for the Standards Coordinating Committee of the Interagency Board for Equipment Standardization and Inter-operability (IAB) to work in collaboration with the Oklahoma City National Memorial for the Prevention of Terrorism(MIPT), the National Institute for Occupational Safety and Health (NIOSH), National Fire Protection Association (NFPA), Soldier Biological Chemical Command (SBCCOM), and the Occupational Safety and Health Administration (OSHA), to develop a national suite of standards and test methods for first responder equipment.

Protect — NIJ is collaborating with the Washington Metropolitan Area Transit Authority (WMATA) and Argonne/Sandia National Labs to demonstrate the utility of a chemical detection monitor in a subway environment. The intent of the project, for which initial funding was provided by NIJ, is to develop a capability for protection against a chemical weapons attack through the installation of a prototype real-time early warning chemical detection and alarm system. This system will increase the speed of evacuation with emergency alarms, video coverage, and announcements. In addition, early reaction time will allow the equipment to shutdown in order to prevent further spreading of agent.

First Responder Escape Mask — NIJ and TSWG are collaborating to develop a short-duration protective mask that will protect first responders for enough time to exit the hazardous area, alert appropriate officials, and prevent others from entering the area.

The mask must be lightweight, low-cost, and configured to be easily carried and donned quickly. It is intended for use in situations where there is little or no warning.

The Center for Civil Force Protection — NIJ provides funding to Sandia National Laboratories (SNL) for the Center for Civil Force Protection (CCFP). The Center provides physical security counter terrorism assistance to state and local law enforcement agencies, other organizations within State and local governments and private industry. While SNL itself initially provides the bulk of the assistance, the longer-term strategy is to form relationships with other organizations to make available their complementary counterterrorism expertise through the CCFP as a one-stop shop.

Light-Weight Chem-Bio EOD Suit Testing — NIJ in collaboration with TSSWG, is sponsoring independent testing of the Med-Eng SRS-5 bomb suit coupled with various chemical and biological (C/B) protective undergarments and SCBA breathing apparatus. The SR-5 is a light weight, flexible bomb suit that provides balanced protection for personnel who perform improvised explosive device (IED)

searches and render safe procedures. The purpose of this testing is to determine the optimum C/B protective ensemble for the SR-5 and to determine its effectiveness in providing C/B protection when subject to detonation of an IED.

Flying Plate Disrupters — NIJ, through the Joint (Justice - Defense) Program Steering Group (JPSG), is sponsoring the Naval Surface Warfare Center's Indian Head Division to develop and demonstrate a solution to the problem of dealing with large fuel-fertilizer bombs by using explosively formed slugs, of "flying plates." Derived from military technology that was developed for breaching and destroying armored vehicles, this system consists of a plastic cylinder capped by a 3 inch to 6 inch copper plate, and packed with a small explosive charge. When that charge is detonated, the plate is deformed into a slug and propelled into the explosive device, scattering the explosive material without detonation. Prototype design and development was completed in 1999. NIJ funded a demonstration with the FBI-sponsored, Kansas Missouri Bomb Technician Working Group, which was completed in August 2000. Recommendations arising from that demonstration will be incorporated into a revised design in FY01.

Improved Bomb Robots — NIJ, through JPSG, and in collaboration with TWSG, sponsored a first of its kind study to define practitioner requirements for bomb robots and to identify any shortfalls in the current generation of bomb robots' ability to meet those requirements. The result of this effort will be used to produce an improved bomb robot for state and local bomb squads. The robot report is available online at www.nlectc.org/jpsg/robotassessment/robotassessment.html A solicitation for development of improved bomb robotics is being drafted. Release of a solicitation is anticipated in February 2001 with development commencing by June 2001.

Bomb Technician Training Tool — NIJ, through the JPSG, sponsored Eastern Kentucky University (EKU) to develop a PC-based data retrieval tool for bomb technicians and investigators. This effort will transfer to three CDs the 20,000 pages of print, drawings, photographs and charts contained in bomb technical, investigative and general information bulletins that have been published by the FBI for over 30 years. Coupled with an innovative search software package this technology will provide bomb technicians instantaneous access to a comprehensive library of bomb information while onsite at a bomb response call or a fast moving investigation. ` Development of the initial 3 CD set is complete and available through the FBI Bomb Data Center to military and civilian bomb squads across the United States and to 11 foreign countries.

Explosive Diagnostics — NIJ, through JPSG, and in collaboration with TSWG and the FBI is sponsoring a nationwide demonstration and evaluation, by law enforcement agencies of improved diagnostic systems for explosive devices. The first technology being evaluated is the RTR-3, developed under TSWG auspices. Thr RTR-3 is a computer based, portable x-ray system, that enables the diagnosis of

explosive devices in real-time. It also enables the transmission of x-ray images of those devices, via modem, to remote Disposal Technology Division and the Naval Office of Special Technology are supporting this project. In FY00 the explosive diagnostic program began evaluation of the RTR-4 and Delta X-ray foxRayII systems. This project will involve agencies from 27 states, the District of Columbia, and Puerto Rico.

For more information (status, contact person, etc.) on these, and other NIJ, technology projects, check the JUSTNET web page at: http://www.nlectc.org

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Light travels faster than sound. This is why some people appear bright until you hear them speak.

2000 EMERGENCY RESPONSE GUIDEBOOK ERROR

There is an error in the English language version of the printed Emergency Response Guidebook (ERG) on page 360. In the table of water-reactive materials which produce toxic gases (green-bordered pages),
the wrong Guide is listed for dimethyldichlorosilane (ID# 1162)

The correct orange-page guide for this material is 155. It is correctly listed in the ID number index (yellow-bordered pages, page 29) and the name of the material index (blue bordered pages, page 130). This changes the category from substance-toxic and/or corrosive (flammable/water sensitive).

The U. S. Department of Transportation (USDOT) is requesting assistance in dissemination this information to as many users of the ERG as possible.

The correction has been made to the Internet version of the ERG on USDOT's Office of Hazardous Materials Safety Website:
htttp://hazmat.dot.gov/gydebook.htm.

HAVE A WONDERFUL SPRING!!!!